ABSTRACT

A distance correcting apparatus of a surroundings monitoring system includes a stereo imaging means for stereoscopically taking a pair of images of a frontal scenery, a parallax calculating means for calculating a parallax based on the pair of images, a distance calculating means for calculating a distance to an object based on the parallax and a parameter for correcting distance, an approximation line calculating means for calculating a plurality of approximation lines extending in the distance direction in parallel with each other based on the images, a vanishing point calculating means for calculating a vanishing point of the images from a point of intersection of the approximation lines and a parameter correcting means for correcting the parameter based on the calculated vanishing point.